

PMA Models

KEY FEATURES

- Installer Programmable DSP Processing for All PRO Loudspeakers
 - Software Selectable Input Routing for All Channels Plus Looping Outputs
 - Installer Selectable Acoustic Compensation Filters
 - Perforated Screen Compensation
 - Room Boundary Loading Compensation
 - 80Hz High-Pass Filter
 - Level Control
 - Parametric EQ Filters
 - Ultra Low Noise Audio Converters: 123dB Dynamic Range
 - Configurable Amplifier Channel Powers: 200W, 450W and 1000W
 - Balanced Audio Inputs with Transformer Isolation*
 - Up to 4 Channels and 4000W** in 2U Chassis
 - 5.1 Bi-Amp System with Dual Subs in 6U Total Rack Space
 - 7.1 Bi-Amp System with Dual Subs in 8U Total Rack Space
- * Transformers optional ** 230V Operation recommended



DESCRIPTION

Combining high efficiency amplification with advanced DSP processing, the PMA (Programmable Modular Amplifier) series of products introduces operational and performance refinements in a highly adaptable design. Each PMA amplifier employs a common “digital mainframe” to which power modules of 200, 450, or 1000 watts can be mounted. Flexible by design, each mainframe is populated with either two or four channels of amplification based on the system’s needs and specific loudspeaker or subwoofer application. By allowing the mix of modules, the PMA amplifier provides efficient use of power, supplying the appropriate wattage level needed for each specific application (i.e. 1000 watt modules may be used to drive subwoofers, while 450 watt modules may be mixed with 200 watt units to bi-amplify the low-frequency and higher efficiency high-frequency drivers respectively).

As with all PRO products, high resolution digital signal processing (DSP) lays at the heart of the PMA design. High resolution filtering allows PRO engineers to attain levels of technical accuracy orders of magnitude beyond previous designs. When driven by the PMA, the output of each loudspeaker precisely mimics the input signal of its assigned channel, rendering performance tolerances previously only attainable at the pre-amp and power-amp level. The resulting resolution of detail and musical accuracy set a new standard for lifelike portrayal of music and video soundtracks alike.

In addition to its modular design, the PMA provides an installer programmable platform from which any channel of the amplifier

SPECS

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can be assigned a proprietary DSP filter matching any driver in a multi-way PRO loudspeaker system. A mini-USB interface and customized Microsoft Windows utility make programming of a complete system quick and easy. For greater flexibility, looping outputs allow multiple PMA chassis to be connected and share pre or post DSP processed signals. This is especially useful for installations employing multiple side channel loudspeakers, or where sophisticated multi-subwoofer configurations are used to address room modes.

Built on proven Class-D technology from Bang & Olufsen, each PMA amplifier operates efficiently, providing generous power while producing little heat. A balanced design, all connections are made via transformer isolated (optional) XLR inputs, minimizing ground-loop hum and buzz problems. In addition, each amp employs world class A-D and D-A converters with native dynamic range of 123dB!

PMA Amplifier-Processor Specifications

Specification	2222	4400	4242	4444	9900	9922	9942	9944	9999
Power Ch 1, 4 ohms	200W	450W	450W	450W	1000W	1000W	1000W	1000W	1000W
Power Ch 2, 4 ohms	200W	450W	200W	450W	1000W	1000W	1000W	1000W	1000W
Power Ch 3, 4 ohms	200W	-	450W	450W	-	200W	450W	450W	1000W
Power Ch 4, 4 ohms	200W	-	200W	450W	-	200W	200W	450W	1000W
Voltage Gain	27dB								
Power Requirements, 1/8 Power, pink noise, 120VAC, all channels driven	92W 314 Btu/hr	96W 328 Btu/hr	136W 464 Btu/hr	180W 614 Btu/hr	173W 590 Btu/hr	215W 734 Btu/hr	237W 809 Btu/hr	259W 884 Btu/hr	338W 1153 Btu/hr
Idle Power	32W 109 Btu/hr	28W 96 Btu/hr	38W 130 Btu/hr	44W 150 Btu/hr	34W 116 Btu/hr	46W 157 Btu/hr	49W 167 Btu/hr	52W 177 Btu/hr	60W 205 Btu/hr
Standby Power	20W 68 Btu/hr	14W 48 Btu/hr	26W 89Btu/hr	32W 109 Btu/hr	15W 51 Btu/hr	21W 72 Btu/hr	24W 82 Btu/hr	27W 92 Btu/hr	22W 75 Btu/hr
Input Impedance	24k Ohms								
Input Sensitivity									
200W channels	1.3V								
450W channels	1.9V								
1000W channels	2.8V								
Damping Factor									
200W channels	>200, 4-ohm load; >400, 8-ohm load								
450W channels	>200, 4-ohm load; >400, 8-ohm load								
1000W channels	>800, 4-ohm load; >1600, 8-ohm load								
Frequency Response*	20Hz-20kHz +/- 0.2dB* *1000W Ch 2 and 3 20Hz-3kHz +0,-3dB								
Idle Noise, flat program, A-weighting									
200W channels	-78dBV (0.00013V)								
450W channels	-77dBV (0.00014V)								
1000W channels	-73dBV (0.00022V)								
Idle Noise, speaker program (typ.), A-weighting									
200W channels	-81dBV (0.00009V)								
500W channels	-80 dBV (.00010V)								
1000W channels	-76 dBV (0.00016V)								
Signal to Noise									
200W channels	108dB								
450W channels	109.5dB								
1000W channels	108dB								
Distortion, 1kHz, 1dB below max power output	<0.07%								
Dimensions	19.0" W x 3.5" H x 16.7" D								
Net Weight	13lbs.	14lbs.	14lbs.	15lbs.	15lbs.	16lbs.	17lbs.	17lbs.	20lbs.
Shipping Weight	18lbs.	19lbs.	19lbs.	20lbs.	20lbs.	21lbs.	22lbs.	22lbs.	25lbs.

*SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE